



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,492	11/13/2003	Michael Stuart Weaver	UDC-20201 CON	8333
27774	7590	05/24/2006		
MAYER & WILLIAMS PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			EXAMINER SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H-A

Office Action Summary

Application No.

10/712,492

Applicant(s)

WEAVER, MICHAEL STUART

Examiner

Laura M. Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-58 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 44-58 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 44-55 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by
Silvernail ('568).

In reference to claim 44, Silvernail teaches a device comprising:

A substrate (Fig.2 (110);

An organic optoelectronic device (OOD) over the substrate, the OOD selected from a OLED, an OED, an OPD and an OTFT (Fig.2 (140); and

A barrier region disposed over the OOD, the barrier region comprising a plurality of cooperative barrier layers, the plurality of cooperative barrier layers further comprising a planarizing layer and a high-density layer, wherein the high-density layer is disposed over the planarizing layer in a manner such that the high-density layer extends to the substrate layer and, in conjunction with the substrate layer, completely surrounds the planarizing layer (Fig.2 (150).

In reference to claim 45, Silvernail teaches wherein the plurality of cooperative barrier layers comprises two or more planarizing layers and two or more high-density layers and wherein each

Art Unit: 2813

overlying cooperative barrier layer that is disposed over one or more underlying cooperative barrier layers extends to the substrate in a manner such that the one or more underlying cooperative barrier layers are surrounded by the substrate and each overlying cooperative barrier layer (Fig.2 (150)).

In reference to claim 46, Silvernail teaches wherein the cooperative barrier layers comprise an alternating series of two or more planarizing layers and two or more high-density layers (Fig.2 (150)).

In reference to claim 47, Silvernail teaches wherein the alternating series comprises 3 to 7 planarizing layers and 3 to 7 high density layers (Fig.2 (150)).

In reference to claim 48, Silvernail teaches wherein the planarizing layer comprises a material selected from fluorinated polymers, parylenes, cyclotenes and polyacrylates (Col.5, lines: 1-5).

In reference to claim 49, Silvernail teaches wherein the high-density layer comprises a material selected from metal oxides, metal nitrides, metal carbides, metals and metal oxynitrides (Col.5, lines: 10-20).

In reference to claim 50, Silvernail teaches wherein the high density layer comprises a material selected from SiO, SiN, AlO, ITO, ZITO (Col.5, lines: 10-20)

Art Unit: 2813

In reference to claim 51, Silvernail teaches wherein the organic optoelectronic device is an OLED device (Col.1, lines: 25-35).

In reference to claim 52, Silvernail teaches wherein the substrate is rigid (Col.4, lines: 55-65- some materials listed are rigid).

In reference to claim 53, Silvernail teaches wherein the substrate is a flexible substrate (Col.4, lines: 55-65 and Col.1, lines: 39-41).

In reference to claim 54, Silvernail teaches wherein the substrate comprises metal foil (Col.1, lines: 39-41).

In reference to claim 55, Silvernail teaches wherein the substrate comprises a rigid glass layer (Col.1, lines: 39-41).

In reference to claim 56, Silvernail teaches wherein said OOD is an organic electrochromic display(Col.1, lines: 14-20).

In reference to claim 57, Silvernail teaches wherein the OOD is an organic photovoltaic device(Col.1, lines: 14-20).

In reference to claim 58, wherein the OOD is an organic TFT (Col.1, lines: 14-20).

Response to Arguments

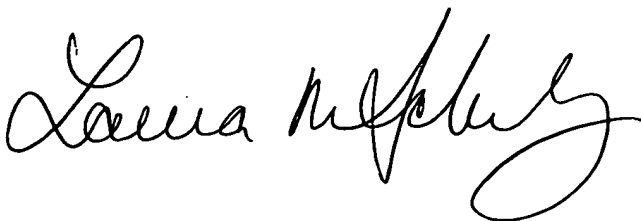
Applicant's arguments with respect to claims 44-58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Laura M. Schillinger', with a stylized, flowing script.

Laura M Schillinger
Primary Examiner
Art Unit 2813

Application/Control Number: 10/712,492

Page 6

Art Unit: 2813

5/22/06